

BIRDS OF THE MUNJA-WALCOTT INLET AREA WEST KIMBERLEY, WESTERN AUSTRALIA.

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INTRODUCTION

The three of us recorded bird data while in the Munja-Walcott Inlet area between 1-27 May 1983, participating in the Australian and New Zealand Scientific Exploration Society (ANZSES) 1983 Kimberley expedition. All data were recorded opportunistically while exploring the area on foot. Additionally, a 4m aluminium runabout was available for access to the Calder and Charnley Rivers.

With the exception of some bird notes by Rev. McMillan for 'Munja Lagoon' in the early 1950's, which are recorded in Storr (1980) no naturalists we are aware of have recorded data in the general area prior to this expedition. However since this expedition several sites near Walcott Inlet were surveyed between June 1987 and March 1989 as the Kimberley component of the National Rainforest Programme. One site in particular, 21/4, located at 124° 58' 30"E 16° 21' 20"S was surveyed for birds by Johnstone and Burbidge (1991). This site was described as "swamp or riverine situation on alluvial soil"; it is within several hundred metres of both the 'garden lagoon' and 'gallery forest' described in this paper.

The general area and specific habitats within it are described in Kenneally and Edinger (this publication). However, sites of faunal interest are described briefly below. Some of the areas examined by us particularly the south side of the Charnley River, are included in the proposed Walcott Inlet National Park (see Burbidge et al. 1991).

Site 1

Base camp. A small area (<0.5 ha) or riparian woodland on the Calder River where it is joined by Neville Creek at 124° 58'E 16° 19'S. Prominent tree species are *Melaleuca leucadendra*, *Lysiphyllum cunninghami* and *Terminalia*.

Site 2

Charnley River monsoon forest. A discrete patch of monsoon forest and vine thicket of ca 5-10 ha extent on the Charnley River at 124° 59'E 16° 23'S. Rough and tumbled King Leopold Sandstone is immediately continuous with this site.

Site 3

Ravine in Harding Range. A valley incised into the Harding Range escarpment with extensive (ca 10-15 ha) monsoon forest and vine thicket at the valley head. A small creek with riparian woodland on basaltic rocks formed the ravine which fed into Neville Creek. Located at 124° 58'E 16° 15'S.

Site 4

Gallery Forest. An isolated tall dense forest community located in a minor watercourse on the edge of King Leopold Sandstone at 124° 58' 30"E 16° 21' 00"S.

These sites are shown in Figure 1 in Kenneally and Edinger (this publication). Other more extensive habitats examined were:

1. Munja Plain, a low lying alluvial expanse of grassland with numerous lagoons, some surrounded by woodland.
2. Savannah woodland which occurs between the Harding Range and the Calder River.
3. Low open woodlands on sandstone; Warton Sandstone on the Harding Range escarpment and King Leopold Sandstone elsewhere.

Extensive mangroves which mainly occur where Walcott Inlet is much wider were not examined.

An attempt was made to examine 'Munja Lagoon', located by Storr (1980) at 124° 55'E 16° 21'S. These co-ordinates are in error as there is no lagoon here. A lagoon very close to the old Munja settlement at 124° 56' 45"E 16° 21' 45"S was quite unproductive. Another lagoon at 124° 58' 45"E 16° 21' 20"S, designated 'garden lagoon' by its presumed proximity to the Munja gardens was the most productive for waterfowl (see annotated list).

Data were recorded quantitatively as well as qualitatively; assessments were made as follows:

Scarce:	1 or 2	observations for the expedition's duration
Uncommon:	2 to 10	observations for the expedition's duration
Moderately Common:	10 to 50	observations for the expedition's duration
Common:	50 to 100	observations for the expedition's duration
Very Common:	100 plus	observations for the expedition's duration

One of us (TM) set a 20m mist net in Neville Creek monsoon forest (Site 3) at 0800 hours on 23 May 1983. The net was operated continuously until 1200 hours on 25 May 1983. Capture data are presented elsewhere in this report. All birds were released 1km from capture site to avoid recapture.

It was hoped that mist-netting would detect whether Rainbow Pittas were present in the monsoon forest in the upper reaches of Neville Creek in the Harding Range (Site 3). No pittas were caught or observed in spite of the apparent suitability of the habitat and the successful capture of considerable numbers of other species. The mist net location turned out to be within a few metres of an active bower of a Great Bowerbird which may have chased off other species. Over a two day period the following birds were captured and released: Great Bowerbird: -three times, Little Shrike-thrush: -six times, and Bar-shouldered Dove: -once.

Nomenclature follows (Storr 1980).

ANNOTATED LIST

PELECANIDAE

Pelecanus conspicillatus - Australian Pelican.

Commonly seen; individuals and in small groups of 3-4 along Calder River and on sandbars at Calder/Charnley confluence. Seen fishing on Calder 'tidal meadow' at high tide. A group of 57 was seen flying high over Munja.

PHALACROCORACIDAE

Phalacrocorax sulcirostris - Little Black Cormorant.

Uncommon, one individual on billabong, small groups (5-6) flying over or along rivers.

Phalacrocorax melanoleucos - Little Pied Cormorant.

More frequently seen than *P. sulcirostris*, individuals on rivers and lagoons, small groups to 7 flying along rivers.

Anhinga melanogaster - Darter.

Approximately as abundant as *P. melanoleucos*, individuals and pairs, on lagoons, dead trees and on riverside rocks.

ARDEIDAE

Ardea pacifica - Pacific heron.

Uncommon, mostly individuals flying and perching in trees; also small groups of 3-4.

Ardea novaehollandiae - White-faced Heron.

Very common, usually individuals, occasionally pairs, on edge of rivers, in trees and eastern end of Walcott Inlet.

Egretta alba - Great Egret.

Uncommon, individuals on edge of rivers, once on lagoon.

Egretta garzetta - Little Egret.

Very common, individuals and groups of up to 15, usually on bard mud banks of rivers; also sandbars at eastern end of Walcott Inlet.

Egretta sacra - Eastern Reef Heron.

Uncommon, individuals (grey phase) seen on muddy spit in Walcott Inlet and on mud banks of rivers.

Butorides striatus - Mangrove Heron.

Uncommon, individuals on mud banks and in mangroves at east end of Walcott Inlet.

Nycticorax calendonicus - Rufous Night Heron.

Uncommon, individuals in riparian woodland along upper Calder River and lower Charnley River.

CICONIIDAE

Ephippiorhynchus asiaticus - Black-necked Stork.

Uncommon, individuals, usually seen flying over/along rivers. One on sandbar at Calder/Charnley confluence.

THRESKIORNITHIDAE

Threskiornis spinicollis - Straw-necked Ibis.

Common, usually medium sized groups of up to 15, perching in riverside trees on Munja Plain. A group of 50 plus flying over lower Calder River.

Threskiornis aethiopicus - Sacred ibis.

Less common and in smaller groups (usually 2-3) than *T. spinicollis*. Always on riverside (cf. *T. spinicollis*), sometimes with *Egretta garzetta*.

Platelae regia - Royal Spoonbill.

Scarce, one only seen on riverside 'tidal meadow' at high tide on Calder River.

ANATIDA

Anseranas semipalmata - Pied Goose.

Moderately common, group between 3-8 in trees around lagoons. One group of 60 plus in lagoon and surrounding trees.

Cygnus atratus - Black Swan.

Not seen by us but reported in the 1950's from 'Munja Lagoon' (Storr 1980).

Dendrocygna arcuata - Chestnut Whistling Duck.

Uncommon, one group of seven in mangroves at eastern end of Inlet.

Nettion pulchellus - Green Pygmy Goose.

Uncommon, one group of six on 'garden lagoon'.

ACCIPITRIDAE

Haliastur indus - Brahminy Kite.

Moderately common, usually singly over lower reaches of rivers; also pairs perching in low riverside vegetation.

Haliastur sphenurus - Whistling Kite.

Status uncertain, usually very common or few individuals continually present at riverside camps. Calling persistently.

Milvus migrans - Black Kite.

Uncommon, singly or in pairs at riverside camps after several days occupancy.

Accipiter fasciatus - Brown Goshawk

Uncommon, one bird, a female, over lower Charnley River. Others could not be readily distinguished from *A. cirrocephalus*.

Aquila morphnoides - Little eagle.

Scarce, one flying over King Leopold Sandstone.

Aquila audax - Wedge-tailed Eagle.

Uncommon, occasionally over rivers, usually in Harding Range. A disused nest in eucalypt on Munja Plain.

Haliaeetus leucogaster - White-breasted Sea Eagle.

Moderately common over lower reaches of rivers and eastern end of Walcott Inlet. Occasionally flying over trees on Munja Plain. One juvenile seen.

Circus assimilis - Spotted Harrier.

Uncommon, over lower reaches of rivers and Munja flood plain.

Circus aeruginosus - Marsh Harrier.

Scarce, one over 'garden lagoon'.

FALCONIDAE

Falco peregrinus - Peregrine Falcon

Scarce, perching in dead tree on Munja Plain, also flying over river.

Falco longipennis - Australian Hobby.

Scarce, one at Calder/Charnley confluence, another persistently seen at dusk flying over tree tops feeding on dragonflies in Harding Range ravine.

Falco berigora - Brown Falcon.

Uncommon, seen individually over Munja, along creeks and rivers.

Falco cenchroides - Australian Kestrel

Scarce, one on Boab tree at Munja.

GRUIDAE

Grus rubicundus - Brolga

Common, in small groups of up to 8-9 and singly on Munja Plain. Tidal meadows and lagoons.

OTIDIDAE

Otis australia - Bustard.

Uncommon, singly and in pairs over and in savannah woodlands, one group of 8 on long, thin island in Walcott Inlet.

JACANIDAE

Jacana gallinacea

Not seen by us but reported in the 1950's from 'Munja Lagoon', (Storr 1980).

CHARADRIIDAE

Vanellus miles - Masked Plover.

Uncommon, a pair repeatedly seen on rockbar in Calder River opposite Munja.

Charadrius melanops - Black-fronted Plover.

Uncommon, usually in pairs on rocky river bed in Calder River in vicinity of base camp, calling persistently.

SCOLOPACIDAE

Numenius phaeopus - Whimbrel.

Scarce, single birds and a group of three near Charnley River mouth on sandbar.

Tringa hypoleucos - Common Sandpiper.

Scarce, individuals seen on banks of Calder and Charnley Rivers.

RECURVIROSTRIDAE

Himantopus himantopus - Black-winged Stilt.

Common, groups of up to ca 25 observed flying upstream along Calder and Charnley Rivers. Flocks of ca 200, 50 and 20 on sandbar at Calder/Charnley confluence.

BURHINIDAE

Burhinus grallarius - Bush Stone Curlew.

Scarce, heard on one occasion at night at base camp.

LARIDAE

Larus novaehollandiae - Silver Gull.

Scarce, small group of 3-4 seen flying over Walcott Inlet. Common at Koolan Island.

Sterna caspia - Caspian Tern.

Scarce, one flying along lower reaches of Charnley River.

Sterna bergii - Crested Tern.

Uncommon, small groups of 2-3 at Walcott Inlet, one group of 8 at Calder River opposite Munja.

Sterna hybrida - Whiskered Tern.

Common, usually in small groups of up to ca 10 flying over lower reaches of rivers and lagoons. One group of ca 40.

COLUMBIDAE

Ducula bicolor - Torres Strait Pigeon.

Moderately common, singly and in pairs in Charnley River monsoon forest (site 2), Gallery forest (site 4), Harding Range monsoon forest (site 3). Calling persistently. Two 'atypical' habitat records in riparian woodland along Neville Creek. Probably feeding on fruits of *Diospyros ferrea* at site 3.

Geopelia humeralis - Bar-shouldered Dove.

Common, seen and calling persistently in all monsoon forests and riparian woodlands.

Geopelia striata - Peaceful Dove.

Common, seen and calling persistently in all woodland habitats.

Chalcophaps indica - Green-winged Pigeon.

Scarce, seen on ground in dense leaf litter at Charnley River vine thicket (site 2) and Harding Range monsoon forest (site 3). Probably feeding on withered fruits of *Diospyros ferrea* at site 3.

Petrophassa albipennis - White-quilled Rock Pigeon.

Moderately common, singly and in small groups of up to 3 in sandstone habitats of the Harding Range.

Trichoglissus haematodus - Rainbow Lorikeet.

Moderately common, usually seen flying in small groups of 2-3. One group of 5-6 feeding in gallery forest (site 4).

Trichoglissus versicolor - Varied Lorikeet.

Uncommon, always in pairs flying high and fast, usually along rivers.

Asprosmictus erythropterus - Red-winged Parrot.

Uncommon, in small groups of 3-4 in savannah woodland and riparian woodland.

Calyptorhynchus magnificus Red-tailed Black Cockatoo.

Common, in groups of up to 15 along rivers and in Harding Range (site 3).

Cacatua tenuirostris - Corella.

Common, groups of more than 200 plus, often around base camp. Smaller groups of 4-5 elsewhere, including savannah woodlands.

Cacatua galerita - Sulphur-crested Cockatoo.

Uncommon, small groups of 2-3 in savannah woodland, low open woodland on King Leopold Sandstone, and riparian woodland.

CUCULIDAE

Centropus phasianinus - Pheasant Coucal.

Uncommon, single birds in gallery forest (site 4), savannah woodland and low open woodland on King Leopold Sandstone, and in tall rank grassland.

STRIGIDAE

Ninox connivens - Barking Owl.

Scarce, heard on one occasion at Charnley River campsite (site 2).

AEGOTHELIDAE

Aegotheles cristatus - Australian Owlet Nightjar.

Scarce, heard on one occasion in ravine in Harding Range (site 3).

CAPRIMULGIDAE

Eurostopodus guttatus - Spotted Nightjar.

Scarce, one bird repeatedly seen hawking over Calder River at dusk at base camp.

ALCEDINIDAE

Alcedo azurea - Azure Kingfisher.

Scarce, two seen, flying along Charnley River at site 2.

Dacelo leachii - Blue winged Kookaburra.

Uncommon, heard in riparian woodland on Calder River and gallery forest (site 4).

Halcyon sancta - Sacred kingfisher.

Scarce, seen and heard in gallery forest (site 4) and Charnley River monsoon forest (site 2).

MEROPIDAE

Merops ornatus - Rainbow Bee-eater.

Common, seen and heard in small groups of 2-3 in all habitats except monsoon forest.

ALAUDIDAE

Mirafrja javanica - Horsefield's Bushlark.

Common in tall dense grassland on Munja Plain.

HIRUNDINIDAE

Hirundo ariel - Fairy Martin.

Old nests in King Leopold Sandstone in Charnley River gorge.

CAMPEPHAGIDAE

Coracina novaehollandiae - Black-faced Cuckoo-shrike.

Common, small groups of 2-3 in most habitats except monsoon forest.

Coracina papuensis - Little Cuckoo-shrike.

Uncommon, single birds in riparian woodland, gallery forest (site 4) and in low open woodland on Warton Sandstone in the Harding Range.

Lalage sueurii - White-winged Triller.

Scarce, single birds in riparian woodland and low open woodland on King Leopold Sandstone.

Lalage leucomela - Varied Triller.

Uncommon, single birds monsoon forest (site 2), riparian woodland and Harding Range ravine (site 3). Apparently in denser vegetation than *L. sueurii*. Feeding on small white fruits of *Ficus leucotricha* in riparian woodland along Neville Creek.

PACHYCEPHALIDAE

Pachycephala rufiventris - Rufous Whistler.

Common, seen singly and in pairs, and heard in all habitats.

Colluricincla megarrhyncha - Little Shrike Thrush.

Locally very common in monsoon forest/vine thicket in ravine in Harding Range (site 3). Not seen elsewhere.

MONARCHIDAE

Rhipidura rufiventris - Northern Fantail.

Moderately common in riparian woodland in ravine in Harding Range. Other fantails seen on the Calder River and on Mt Daglish were not positively identified.

Rhipidura leucophrys - Willie Wagtail.

Locally common along riparian woodlands, apparently absent or very scarce in other habitats.

Myiagra rubecula - Leaden Flycatcher.

Status uncertain. One female positively identified in vine thicket in Harding Range ravine (site 3), other grey-headed Flycatchers with tawny throats seen in a wide variety of habitats could not be ascribed to this species or *M. reficollis*.

Myiagra inquieta - Restless Flycatcher.

Uncommon, though always present at base camp. Heard on Charnley River.

ORTHONYCHIDAE

Pomatostomus temporalis - Grey-crowned Babbler.

Uncommon, small groups of up to 6 seen in low open woodland on Warton and King Leopold Sandstones and in savannah woodland.

ACANTHIZIDAE

Gerygone chloronota - Green-backed Warbler.

Identification uncertain. A small nondescript warbler with a call very similar to *G. fusca* was moderately common in riparian woodlands.

Smicromis brevirostris - Weebill.

Uncommon, in small groups of 3-4 in riparian woodlands but more often in savannah woodlands.

MALURIDAE

Malurus lamberti - Variegated Fairy-wren.

Scarce, one male, three females in *Pandanus* with grasses on Warton Sandstone in Harding Range.

Malurus melanocephalus - Red-backed Fairy-wren.

Scarce, one male in eclipse plumage in dense grasses on bank of Calder River. A small group of 2-3 in rank grassland on Munja Plain.

SYLVIIDAE

Cisticola exilis - Golden-headed Fantail Warbler.

Moderately common, small groups of 2-3 in tall dense grassland on Munja Plain.

CLIMACTERIDAE

Climacteris melanura - Black-tailed Tree-creeper.

Scarce, individual birds seen in savannah woodland and low open woodland on Warton Sandstone in Harding Range.

DICAEIDAE

Dicaeum hirundinaceum - Mistletoebird.

Common, individual birds seen in all habitats with trees including mangroves.

PARDALOTIDAE

Pardalotus striatus - Striated Pardalote.

Common, small groups of 2-3 and individuals in all habitats with trees except vine thicket/monsoon forest.

MELIPHAGIDAE

Lichmera indistincta - Brown Honeyeater.

Very common in small groups of 3-4 in most habitats; scarce in vine thicket/monsoon forest.

Meliphaga flavescens - Yellow-tinted Honeyeater.

Scarce, two birds seen in *Pandanus* in gallery forest (site 4).

Meliphaga unicolor - White-gaped Honeyeater.

Common, individuals and small groups in all habitats with trees. Observed feeding on flowering *Eugenia*, mistletoe, *Xanthostemon paradoxus* and fruits of *Trema*.

Melithreptus gularis - Black-chinned Honeyeater.

Scarce, pairs and individuals, in low open woodland on sandstone including summit of Mt Daglish.

Melithreptus cyanotis - Blue-faced Honeyeater.

Scarce, one in *Pandanus* in gallery forest.

Philemon citreogularis - Little Friarbird.

Scarce, single birds seen in low open woodland on King Leopold Sandstone and in savannah woodland.

Philemon argenteiceps - Silver-crowned Friarbird.

Scarce, one in savannah woodland.

Cissomela pectoralis - Banded Honeyeater.

Scarce, two seen in low open woodland in King Leopold Sandstone.

Ramsayornis fasciatus - Bar-breasted Honeyeater.

Scarce, one in Warton Sandstone on plateau of Harding Range.

PLOCEIDAE

Neochmia phaeton - Crimson Finch.

Uncommon, small groups of up to 5 in savannah woodland, feeding on ground in riparian woodland, and in *Sorghum* grasses on edge of gallery forest.

Poephila bichenovii - Double-barred Finch.

Common, single birds and pairs in grasses in riparian woodland, in *Pandanus* by sandstone. A pair with nest in *Melaleuca leucadendra* by Calder River.

Poephila acuticauda - Long-tailed Finch.

Scarce, one group of 3 in savannah woodland by Neville Creek.

Erythrura gouldiae - Gouldian Finch.

Scarce, one group of 5 in savannah woodland by Neville Creek.

Lonchura castaneothorax - Chestnut-breasted Mannikin.

Scarce, groups of up to 9 in *Eucalyptus papuana* savannah woodland and in riparian woodlands.

ORIOLIDAE

Oriolus flavocinctus - Yellow Oriole

Moderately common, single birds in gallery forest (site 4), and in Charnley River monsoon forest (site 2). This species was distinguished from *O. sagittatus* by more complete striping on lower ventral surface. *O. sagittatus* may also have been present here.

Oriolus sagittatus - Olive-backed Oriole.

Scarce, one in riparian woodland in Neville Creek.

Sphecotheres viridis - Figbird.

Scarce, one male and a small group in riparian woodland in Harding Range ravine.

DICRURIDAE

Dicrurus megarhynchus - Spangled Drongo.

Moderately common, singles and pairs in Charnley River monsoon forest (site 2), Harding Range ravine monsoon forest (site 3) and gallery forest (site 4).

GRALLINIDAE

Grallina cyanoleuca - Magpie Lark.

Moderately common, in groups of up to 9 in lower reaches of rivers.

ARTAMIDAE

Artamus minor - Little Woodswallow.

Moderately common, groups of 3-4, mainly around Harding Range escarpment including Mt Daglish. Also perched in savannah woodland, and over sandstones and lagoons.

CRACTICIDAE

Cracticus torquatus - Grey Butcherbird.

Uncommon, heard only, in Harding Range ravine and riparian woodland along Neville Creek.

Cracticus nigrogularis - Pied Butcherbird.

Moderately common, single birds in riparian and savannah woodlands.

PTILONORPHYNBCHIDAE

Ptilonorhynchus nuchalis - Great Bowerbird.

Common, individual birds seen in all habitats except grassland and savannah woodland. Feeding on fruits of *Celtis philippensis*.

Corvus orru - Australian Crow.

Scarce, one on Boab tree on Munja Plain.

Corvus bennetti - Little Crow.

Common, small groups of up to 6 in most habitats; often flying up and down rivers.

DISCUSSION

With 111 species recorded, most of the prominent Kimberley bird families are represented in the Munja-Walcott Inlet area. Some families, eg finches (Ploceidae) with 5 species and raptors (Accipitridae and Falconidae), with 14 species, are particularly well represented. Not recorded by us but probably present are quails (Phasianidae) and more particularly button-quails (Turnicidae), rails (Rallidae) and cuckoos (Cuculidae).

Other observers and more particularly observations in other seasons especially the end of the dry, would add other species. However a dry season list of 15 species for site 21/4 recorded by Johnstone and Burbidge (1991) only listed White-browed Robin not listed by us.

By Australian standards the Munja-Walcott Inlet area has a very rich and diverse avifauna. Most of our data (except a few species from the Inlet) were obtained from an area less than 4 x 15km or 6,000ha. Elsewhere in Australia greater areas, or considerably more effort, are required to record more than 100 species. The reason for the high number of species at Munja is simply the high degree of habitat diversity within a small area. For example within the 12km from Munja settlement to site 4, the following habitats were

present: tidal flats, alluvial plain with grassland, lagoons, riparian woodland, monsoon forest, vine thicket and low open woodland on sandstone.

The lagoons on Munja Plain were of particular interest to us. However, with only seven species recorded these were less productive than anticipated. Perhaps an excessively wet and late monsoon season in 1982-83 allowed other species of waterfowl to be widely dispersed throughout the Kimberley at the commencement of the dry season. Extensive waterfowl dispersal following heavy, unseasonal rains has been demonstrated in the south-west of Western Australia (Bekle 1983).

Some waterfowl, particularly herons, ibises, egrets and pelicans were much more abundant on the Calder than the Charnley River. This relate to the Calder having ca 6km of tidal lower reaches compared to 3km for the Charnley. Additionally, 'tidal meadows' ie narrow margins of semi-aquatic grassland which are awash at high tide, are better developed on the former river. The greatest number of species were recorded on the Calder River on 15 May 1983 at hight tide which was 10.3 metres at Koolan Island. It was particularly noticeable that numbers of waterfowl diminished rapidly downstream of the Calder/Charnley confluence where salinity was noticeably higher.

The most interesting aspect of bird zoogeography in the Munja area relates to the presence of monsoon forest and vine thickets. These formations are at their most southerly in Western Australia at the northern end of the Dampier Peninsula, Kenneally (1983), at a latitude only a few minutes south of Walcott Inlet. Accordingly we did not expect to find such extensive and well developed areas of these formations here. The following species were only recorded in monsoon forest/vine thicket: Torres Strait Pigeon, Green-winged Pigeon, Sacred Kingfisher, Yellow Oriole and Spangled Drongo. Of these Green-winged Pigeon, [known previously south to the Carson escarpment, Storr (1980)] is a minor extension of range. Neither Torres Strait Pigeon nor Green-winged Pigeon occur in the Dampier Peninsula vine forests (see Johnstone 1983).

The bird community in the monsoon first at site 3 was observed in enough detail by one of us (TM, who spent 6 days there) for some observations to be made, in addition ot the general checklist for this area. An estimation of relative abundance of the species in this community (including mist-netting results) is as follows:

Little Shrike-thrush	abundant
Yellow Oriole	common
Bar-shouldered Dove	common
Great Bowerbird	common
White-gaped Honeyeater	fairly common
Green-winged Pigeon	fairly common
Northern Fantail	fairly common
Green-backed Flyeater	present
Varied Triller	present

Leaden flycatcher	present
Torres Strait Pigeon	present
Mistletoebird	uncommon
Spangled Drongo	uncommon
Figbird	uncommon
Rufous Whistler	uncommon

Fleshy fruits were common in the monsoon forest at the time of our visit; the following were available; figs (*Ficus* spp.), *Diospyros ferrea*, *Cassine melanocarpa*, *Celtis philiphenses*, *Citriobatrus spinescens*, *Fissistigma* and *Randia cockinchinensis*.

The most common birds are insectivores and frugivores. The Little Shrike-thrush was observed feeding at all levels in the forest, however it foraged little on the ground. There are at least three species of pigeons in this forest: Torres Strait Pigeon, feeding on fleshy fruit in the canopy and passing intact, viable seeds in its faeces; Green-winged Pigeon, feeding mainly on the ground and Bar-shouldered Dove, feeding exclusively on seeds on the ground.

Apart from the uncommon Mistletoebird there are no species relying entirely on fleshy fruits. Yellow Oriole, Great Bowerbird and Varied Triller all have mixed diets. The most specialised fruit eaters are probably Torres Strait Pigeon and Figbird. An interesting feature of this forest is the poor representation of parrots and honeyeaters. No parrot was observed and the only honeyeater was White-gaped Honeyeater, a species feeding perhaps more on fleshy fruits than on nectar. Three species of very small insectivores occupied the canopy: Northern Fantail (sallying), Leaden Flycatcher (sallying and gleaning from leaves) and Green-backed Flyeater (gleaning from leaves). Spangled Drongo and Rufous Whistler were larger, hook-billed insectivores but relatively uncommon and possibly dependent upon openings in the canopy. Finally a striking feature of the bird community was the lack of any purely or even predominantly ground feeding invertebrate eaters. Casual observation indicated the nocturnal aerial insect-eating role in the forest (or at least in the relatively open tracts along the creek) is taken by at least one, probably two, species of high-flying bat and one species of low-flying fluttering bat.

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